

# Metallurgical and Mining<sup>©</sup> Industry

№ 9

2016

FOUNDER: "Ukrmetallurginform "Scientific and Technical Agency", Ltd.

## Table of Contents

### Coke and by-product process

**Svetlana Kirienko, Vladyslav Sidletskyi**

Investigation the influence of composition and shape on briquettes compression strength.....8

### Corrosion protection of metals

**Steblyanko Valery, Ponomarev Anton, Medyanik Nadezhda, Shadrunkova Irina, Chekushina Tatiana**

Protection of metal products from corrosion by means of plasma-electrolytic processing of its surface.....14

### Ecology

**Zhurbinskiy D.A., Kostenko T.V., Kostenko V.K.**

Evaluation of radial component of thermal load at workplaces in hot shops.....20

### Foundry

**Natalya Zhizhkina, Sergey Kuzovov**

The development of non-destructive quality control of massive castings.....28

### Machine building

**Igor Panasjuk, Mark Zaljubovskiy**

Determination of design parameters of block linkage mechanism of the drive of machine for processing of details with the compound motion of working reservoir.....34

### Materials science

**Valentina Z. Kutsova, Anna P. Stecenko, Tatiana V. Kotova**

Structure and properties formation of hot-rolled steel 01UT after high pressure torsion.....42

**Valentina Kutsova, Maksim Kovzel, Pavlo Shvets, Anna Grebeneva**

Kinetics of phase transformations in chromium-manganese cast iron.....47

### Mining production

**Andreev B. M., Brovko D. V., Khvorost V. V.**

Prediction and ensuring the reliability of buildings elements and structures of surface complex at reconstruction.....54

**Alexandr Davidenko, Andrei Ighnatov**

Basic results of researches of lining and plugging processes at wells construction.....58

## Patenting

**Novorodovska T., Korogod N., Lamziuk O.**

Features of management decision making in the field of intellectual property of modern enterprise.....66

## Rolling

**Iaroslav Frolov, Mirko Schaper, Olexandr Grydin, Vitalii Andreiev, Andrii Tereschenko**

Propagation of surface defects at cold pilger rolling of tubes and pipes.....72